

INDIRA PRIYADARSHINI COLLEGE, CHHINDWARA (M.P.)

CONSPECTUS

CLASS- **B.C.A. II Sem.**

SUBJECT- **PC SOFTWARE**

Date	Unit	Proposed Contents	Remark
01 Feb 14 - 06 Feb.14	I	MS-Word: Introduction, Word Processing, Advantages of word processing, Creating,	
07 Feb 14 - 13 Feb.14		Saving and Editing a document: Selecting, Deleting, Replacing Text, Copying text to another file.	
14 Feb 14 - 20 Feb.14		Formatting Text and Paragraph: Using the Font Dialog Box,	
21 Feb 14 - 28 Feb.14		Paragraph Formatting using Bullets and Numbering in Para.	
01 Mar 14 - 06 Mar.14		Checking Spelling, Line spacing, Margins, Space before and after paragraph.	
07 Mar 14 - 13 Mar.14	II	Defining Tabs: using Ruler Bar, Mouse and Tabs Dialog Box.	
		Enhancing a Document: Inserting page Breaks,	
14 Mar 14 - 24 Mar.14		Adding Border, Opening and Closing Toolbars, Using Header and Footers in the Document.	
25 Mar 14 - 30 Mar.14		Creating and Formatting Tables: Changing Row height, inserting columns, Merging cells	
01 Apr 14 - 06 Apr.14		Calculations in a Table, Sorting Text, Using Graphics, Using the Drawing Toolbar using word art,	
07 Apr 14 - 14 Apr.14		Mail merge: Defn. a Practical Example of mail merge, creating charts.	
15 Apr 14 - 25 Apr.14	III	MS Excel Introduction, Definition Excel Screen parts of worksheet, Entering information: Numbers, Formula,	
25 Apr 14 - 31 Apr.14		Editing Data in a cell, Excel functions, Using a Range with SUM, Moving and copying data	
		Inserting and Deleting Row and Columns in the worksheet, Using the format cells Dialog box, Naming ranges,	
01 May 14 - 06 May.14		Using chart wizard to create a chart, Performing what if analysis with Data Table.	
07 May 14 - 14 May.14	IV	Protecting a workbook with Password, Macro: Recording and Running a Macro, Linking workbook files Using Pivot table, Inserting Hyper links,	
15 May 14 - 21 May.14		POWERPOINT : Introduction, Slide show, Formatting, Creating a Presentation, Inserting clip Arts, Adding Objects,	
22 May 14 - 30 May.14		Applying Transitions, Animation effects, formatting and checking text, Modifying Visual elements, Preparing a complete presentation, Case studies.	

INDIRA PRIYADARSHINI COLLEGE, CHHINDWARA (M.P.)

CONSPECTUS

CLASS- B.C.A. II Sem.

SUBJECT - Structural Programming (Using C)

Date	Unit	Proposed Contents	Remark
01 Feb 14 - 06 Feb.14	I	Introduction & features of C, Structure of C programs, <i>C Tokens</i> : Character Set, identifiers, keywords,	
07 Feb 14 - 13 Feb.14		constants, string, <i>Operators</i> Arithmetic, Logical, relational,	
14 Feb 14 - 20 Feb.14		Increment, Decrement, Assignment, Conditional and Bitwise	
21 Feb 14 - 28 Feb.14		operators, Precedence and Associativity of op. Data type, Escape sequence, header files.	
01 Mar 14 - 06 Mar.14	II	Single Character Input/Output: <code>getch()</code> , <code>getche()</code> , <code>getchar()</code> , <code>putchar()</code> . Formatted I/O: <code>printf()</code> , <code>scanf()</code> .	
07 Mar 14 - 13 Mar.14		Decision control structure: if, if-else, else if ladder, nested if.	
14 Mar 14 - 24 Mar.14		Loop control structure: Loops, while, do...while, for, nested ,	
25 Mar 14 - 30 Mar.14		break and continue, Case control structure: switch, goto	
01 Apr 14 - 06 Apr.14		Array: Single and multidimensional arrays, array declaration and initialization of Arrays, Passing array to func.	
07 Apr 14 - 14 Apr.14	III	Function: what is a function, why use function, library funct,	
15 Apr 14 - 25 Apr.14		user-defined functions, funct. declaration and prototype, actual and formal parameters, call by value and reference.	
25 Apr 14 - 31 Apr.14		Recursion String: declaration, initialization, standard, library string	
01 May 14 - 06 May.14		functions. Union and Structure: defining structure, declaration of structure variable, accessing structure members, nested structure,	
07 May 14 - 14 May.14		Array of structure, structure assignment, passing structure in to function and return structure from function. Scope and life of variables: local and global variables.	
15 May 14 - 21 May.14	IV	Pointers: pointer notations, operations on pointer, pointer declaration, array of pointers.	
22 May 14 - 30 May.14		File management: creating, opining and processing data files. Disk Input/Output function: <code>fscanf()</code> , <code>fprintf()</code> , <code>tell()</code> , <code>putw()</code> , <code>getw()</code> , <code>putc()</code> , <code>getc()</code> , <code>seek()</code> .	

INDIRA PRIYADARSHINI COLLEGE, CHHINDWARA (M.P.)

CONSPECTUS

CLASS- **B.C.A. II Sem.**

SUBJECT - **Operating System**

Date	Unit	Proposed Contents	Remark
01 Feb 14 - 06 Feb.14	I	Unprocessed scheduling, Types of Scheduling,	
		Scheduling algorithms, Scheduling criteria,	
07 Feb 14 - 13 Feb.14		Concept benefits of Virtual memory, Characteristics of Paging and Segmentation	
14 Feb 14 - 20 Feb.14		Page table structure, TBL, Operating policies for virtual ,	
		Memory, Fetch policy, Placement policy, Replacement policy,	
21 Feb 14 - 28 Feb.14		Resident set management, clearing policy, Load I/O mgt.	
01 Mar 14 - 06 Mar.14	II	I/O devices, Organization of I/O function, The evolution of the I/O function,	
07 Mar 14 - 13 Mar.14		Characteristics of I/O channels. OS design issues, Logical structure of I/O, function, I/O buffering, Disk I/O &	
14 Mar 14 - 24 Mar.14		Disk performance parameters and Disk scheduling policies.	
25 Mar 14 - 30 Mar.14	III	File management: Files, File Management Systems,	
01 Apr 14 - 06 Apr.14		File system architecture, Function of file management,	
07 Apr 14 - 14 Apr.14		File organization and access, File directories, File sharing, Record blocking, Secondary storage management,	
15 Apr 14 - 25 Apr.14		File allocation and its methods, Free space management .	
25 Apr 14 - 31 Apr.14	IV	Concurrency and synchronization, Principles of concurrency,	
01 May 14 - 06 May.14		Operating System concerns, Process interaction, Requirement for Mutual Exclusion, Mutual Exclusion Software ,	
07 May 14 - 14 May.14		Applications, Decker's algorithms, Peterson's algorithms,	
15 May 14 - 21 May.14		Mutual Exclusion Hardware support, Semaphore, Monitors, Deadlock, Condition for deadlock, Deadlock Prevention,	
22 May 14 - 30 May.14		Deadlock detection, Deadlock avoidance ,Implementation, Deadlock Avoidance algorithms.	

INDIRA PRIYADARSHINI COLLEGE, CHHINDWARA (M.P.)

CONSPECTUS

CLASS- **B.C.A. II Sem.**

SUBJECT- **Computer Architecture**

Date	Unit	Proposed Contents	Remark
01 Feb 14 - 06 Feb.14	I	Structure and Function, The Computer System: Computer Components, Computer Function,	
07 Feb 14 - 13 Feb.14		Instruction Fetch and Execution Cycle, Interrupts and the Instruction Cycle,	
14 Feb 14 - 20 Feb.14		Interconnection structures, Bus interconnection, PCI Bus.	
21 Feb 14 - 28 Feb.14	II	Computer Memory System and their characteristics,	
01 Mar 14 - 06 Mar.14		Semiconductor Memory: Main Memory organization,	
07 Mar 14 - 13 Mar.14		dynamic RAM static RAM, ROM, Chip packaging,	
14 Mar 14 - 24 Mar.14		Error correction, cache memory principles.	
25 Mar 14 - 30 Mar.14	III	External memory: Magnetic disk and its read and write mechanism,	
01 Apr 14 - 06 Apr.14		Physical characteristics, Disk performance parameters,	
07 Apr 14 - 14 Apr.14		RAID,	
15 Apr 14 - 25 Apr.14		Optical memory: compact Disk,	
25 Apr 14 - 31 Apr.14		Digital versatile Disk, Magnetic Taps.	
01 May 14 - 06 May.14	IV	Input/ Output - External devices	
07 May 14 - 14 May.14		I/O module, Programmed I/O and Interrupt driver I/O.	
15 May 14 - 21 May.14		Direct Memory Access, I/O channels and processors,	
22 May 14 - 30 May.14		External Interface.	

INDIRA PRIYADARSHINI COLLEGE, CHHINDWARA (M.P.)

CONSPECTUS

CLASS- **B.C.A. II Sem.**

SUBJECT- Advanced **Mathematics**

Date	Unit	Proposed Contents	Remark
01 Feb 14 - 06 Feb.14	I	Integral: Integral as an anti derivative, integration by substitution,	
07 Feb 14 - 13 Feb.14		integration using trigonometric identities,	
14 Feb 14 - 20 Feb.14		special integrals, integration by parts,	
21 Feb 14 - 28 Feb.14		Integration by successive reduction.	
01 Mar 14 - 06 Mar.14	II	Definite integrals: definite integral as a limit of a sum	
07 Mar 14 - 13 Mar.14		Fundamental theorems of calculus,	
14 Mar 14 - 24 Mar.14		evaluation of definite integrals by substitution,	
		properties of definite integrals, area of bounded regions.	
25 Mar 14 - 30 Mar.14	III	Differential equations introduction, differential equations,	
01 Apr 14 - 06 Apr.14		order and degree, formation of differential equations,	
07 Apr 14 - 14 Apr.14		solution of differential equation, equations with variable separable,	
15 Apr 14 - 25 Apr.14		Homogeneous equations, first order linear equations.	
25 Apr 14 - 31 Apr.14	IV	Vectors, positional vector of a point.	
01 May 14 - 06 May.14		Components of a vector operation with vectors,	
07 May 14 - 14 May.14		scalar multiplication, addition,	
15 May 14 - 21 May.14		scalar product and vector product of two vectors.	
22 May 14 - 30 May.14		moment of a vector, scalar and vector triple product.	